

Application No. 09/722,749  
Amendment filed on July 19, 2004  
Reply to Office Action dated April 21, 2004

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### **Amendments to the Claims**

The listing of claims below replaces all prior versions and listings of claims.

#### ***Listing of Claims***

Claim 1 (Canceled).

Claim 2 (Currently Amended): A method of detecting a data transmission comprising a known training sequence that has been received from a channel, comprising the steps of:

selecting a detection parameter set from a table comprising a plurality of detection parameter sets, wherein the selection is based upon the known training sequence of the data transmission;

configuring a receiver using the selected detection parameter set; and  
using the receiver configured with the selected detection parameter set to receive the data transmission;

~~The method according to claim 1,~~ wherein the detection parameter set comprises a synchronization technique.

Claim 3 (Original): The method according to claim 2, wherein the synchronization technique is a maximum window value synchronization technique.

Claim 4 (Original): The method according to claim 2, wherein the synchronization technique is a center of gravity synchronization technique.

Claim 5 (Currently Amended): A method of detecting a data transmission comprising a known training sequence that has been received from a channel, comprising the steps of:

selecting a detection parameter set from a table comprising a plurality of detection parameter sets, wherein the selection is based upon the known training sequence of the data transmission;

configuring a receiver using the selected detection parameter set; and

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using the receiver configured with the selected detection parameter set to receive the data transmission;

~~The method according to claim 1~~, wherein the detection parameter set comprises a channel model.

Claim 6 (Original): The method according to claim 5, wherein the channel model is a standard channel model.

Claim 7 (Original): The method according to claim 5, wherein the channel model is a channel model including a DC component.

Claim 8 (Currently Amended): A method of detecting a data transmission comprising a known training sequence that has been received from a channel, comprising the steps of:

selecting a detection parameter set from a table comprising a plurality of detection parameter sets, wherein the selection is based upon the known training sequence of the data transmission;

configuring a receiver using the selected detection parameter set; and  
using the receiver configured with the selected detection parameter set to receive the data transmission;

~~The method according to claim 1~~, wherein the detection parameter set comprises an equalization technique.

Claim 9 (Original): The method according to claim 8, wherein the equalization technique is DFE equalization.

Claim 10 (Original): The method according to claim 8, wherein the equalization technique is Viterbi equalization.

Claim 11 (Original): The method according to claim 8, wherein the equalization technique is DFSE equalization.

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Claim 12 (Currently Amended): A method of detecting a data transmission comprising a known training sequence that has been received from a channel, comprising the steps of:

selecting a detection parameter set from a table comprising a plurality of detection parameter sets, wherein the selection is based upon the known training sequence of the data transmission;

configuring a receiver using the selected detection parameter set; and  
using the receiver configured with the selected detection parameter set to receive the data transmission;

~~The method according to claim 1,~~ wherein the detection parameter set comprises a channel estimation technique.

Claim 13 (Canceled).

Claim 14 (Currently Amended): A receiver configured to receive from a channel a data transmission comprising a known training sequence, the receiver comprising: a synchronization unit;

a channel estimator unit connected to the synchronization unit;  
an equalizer unit connected to the channel estimator; and  
a control unit that configures the receiver in accordance with a detection parameter set, wherein the control unit selects the detection parameter set based upon the known training sequence being used in the data transmission;

~~The receiver according to claim 13,~~ wherein the detection parameter set comprises a synchronization technique, and the synchronization unit is configured in accordance with the synchronization technique.

Claim 15 (Original): The receiver according to claim 14, wherein the synchronization technique is a maximum window value synchronization technique.

Claim 16 (Original): The receiver according to claim 14, wherein the synchronization technique is a center of gravity synchronization technique.

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Claim 17 (Currently Amended): A receiver configured to receive from a channel a data transmission comprising a known training sequence, the receiver comprising: a synchronization unit;

a channel estimator unit connected to the synchronization unit;  
an equalizer unit connected to the channel estimator; and  
a control unit that configures the receiver in accordance with a detection parameter set, wherein the control unit selects the detection parameter set based upon the known training sequence being used in the data transmission;

~~The receiver according to claim 13,~~ wherein the detection parameter set comprises a channel model.

Claim 18 (Original): The receiver according to claim 17, wherein the channel model is a standard channel model.

Claim 19 (Original): The receiver according to claim 17, wherein the channel model is a channel model including a DC component.

Claim 20 (Currently Amended): A receiver configured to receive from a channel a data transmission comprising a known training sequence, the receiver comprising: a synchronization unit;

a channel estimator unit connected to the synchronization unit;  
an equalizer unit connected to the channel estimator; and  
a control unit that configures the receiver in accordance with a detection parameter set, wherein the control unit selects the detection parameter set based upon the known training sequence being used in the data transmission;

~~The receiver according to claim 13,~~ wherein the detection parameter set comprises an equalization technique.

Claim 21 (Original): The receiver according to claim 20, wherein the equalization technique is DFE equalization.

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Claim 22 (Original): The receiver according to claim 20, wherein the equalization technique is Viterbi equalization.

Claim 23 (Original): The receiver according to claim 20, wherein the equalization technique is DFSE equalization.

Claim 24 (Currently Amended): A receiver configured to receive from a channel a data transmission comprising a known training sequence, the receiver comprising: a synchronization unit;

a channel estimator unit connected to the synchronization unit;

an equalizer unit connected to the channel estimator; and

a control unit that configures the receiver in accordance with a detection parameter set, wherein the control unit selects the detection parameter set based upon the known training sequence being used in the data transmission;

~~The receiver according to claim 13,~~ wherein the detection parameter set comprises a channel estimation technique.